



## DATARITE RECORDING PAPERS AND DEVELOPING SOLUTIONS

*For best results with CEC Datarite magazines and closed magazines.*



### DESCRIPTION

#### *The Recording Papers*

Consolidated's two special DATARITE® recording papers, Types 22 and 33, are available only from CEC. "DATARITE" refers to Consolidated's DATARITE Magazine, in which oscillograms are automatically developed and dried as quickly as data is recorded. The chief difference between the two recording papers is photographic sensitivity. Type 33 is excellent for high writing speed applications; due to its wide latitude of exposure, it can be used for all speeds except the lowest. Type 22 paper, with less sensitive emulsion, produces excellent oscillograms at low writing speeds.

The emulsion formula of the two papers yields records of high trace contrast with a very light background; there is little susceptibility to stain. Materials used in formulating the emulsion of Types 22 and 33 papers are low in abrasive quality, which minimizes wear of the precision dimensions of the DATARITE Magazine applicator slot. To facilitate loading of the paper rolls in the DATARITE

and to avoid fogging under room light conditions, the papers have a short length of black leader material.

Although developed for use in CEC DATARITE Magazines, these papers are completely compatible with Consolidated's full line of oscillographs using conventional develop-out papers.

#### *The Developer Solutions*

Two special processing chemicals were developed for use in DATARITE Magazines. No other developer solutions should be used with CEC recording papers Types 22 and 33. Type 49943-3 developer is a non-ammonia, general purpose formula which provides exceptionally high trace contrast and high writing speed capability.

Type 49943-4 is an ammonia-type formula which combines high writing speeds with reduced paper staining in high humidity environments. Both developers are packaged in 9-ounce plastic throw-away bottles. Caps are self-sealing, and the neck of the bottle is designed to permit easy pouring of the solutions directly into the filler neck of the DATARITE Magazine. No additional mixing or preparation is necessary.



## PHYSICAL CHARACTERISTICS

Stock Tint:	White.
Base Material:	100% rag fibre.
Surface:	(Special) Smooth Matte accepting pencil, ink, or crayon markings.
Thickness:	(Average) .003 inches, sensitized unpressed.
Weight:	(Average) 13.25 lb/1000 sq. ft., sensitized unprocessed.
Image & Background Tones:	DATARITE processed: Black on off-white background. Type 23-109B Oscillogram processed: Black on white.
Handling*:	Darkroom loading for optimum results. Entirely satisfactory results under normal room light loading conditions.
Width Tolerances:	7-inch paper: +0 to -1/32". Over 8": +0 to 1/16".
Tear Strength, Dry:	With grain, 29.5 grams; across grain, 30.5 grams.
Tear Strength, Wet:	With grain, 29.5 grams; across grain, 30.5 grams.
Folding Endurance:	Wet, 101 359° folds before stock separates; dry, 311 359° folds before stock separates.

## PHOTOGRAPHIC CHARACTERISTICS

Relative Speed Index:	Type 22: 10; Type 33: 40.
Spectral Sensitivity:	Orthochromatic. Type 22: 350 to 600 mμ; Type 33: 380 to 545 mμ.
Writing Speed:	In 5-036 DATARITE: Type 22: 2500 inches/sec. Type 33: 5000 inches/sec. In 23-109B Oscillogram Processor or Closed magazine recording: Type 22: 5000 inches/sec. Type 33: 20,000 inches/sec.
Density Range of Image:	(DATARITE) Type 22: .65 density units. Type 33: .60 density units.
Latent Image Life:	(DATARITE processed) 75° to 85°F, 35% RH — 22 days; 75° to 85°F, 65% RH — 15 days; 75° to 85°F, 90% RH — 6 days.
Processing:	DATARITE, 49943-3 Developer (see discussion above); 49943-4 Developer (see discussion above).
Processing:	(CEC Type 23-109B Oscillogram Processor) Conventional techniques utilizing CEC Liquid Chemical Kits #156455 or #217050.

\*Loaded in lighted room, up to 20 feet may be unusable at beginning of record due to exposure, length dependent upon direct light intensities and may vary considerably.

CEC Datarite Types 22 and 33 when recorded in a closed magazine may be processed in CEC 23-109 Oscillogram Processor, using CEC's Liquid Chemical Kits Part Numbers 156455 or 217050.

## RECORDING PAPER

OSCILLOGRAPH	MAGAZINE	DESCRIPTION	CEC PART NO.	FEDERAL STOCK NO.
5-114	28998	CEC Type 22 7" x 225'	217013	
5-115		CEC Type 33 7" x 225'	217018	
5-114	5-047	CEC Type 22 7" x 400'	158817	FSN 6750-811-8238
		CEC Type 33 7" x 400'	158075	FSN 6750-811-8239
5-116	22411	CEC Type 22 5" x 225'	217015	
		CEC Type 33 5" x 225'	217020	
5-118	25683	CEC Type 22 3 1/2" x 70'	158816	
5-118A	5-056	CEC Type 33 3 1/2" x 70'	158297	
5-119	5-006	CEC Type 22 12" x 400'	158818	FSN 6750-811-8241
	5-006A			
	5-032			
	5-036A, B, C	CEC Type 33 12" x 400'	158076	FSN 6750-811-8240
*5-119V	*5-006	CEC Type 22 12" x 400'	158818	FSN 6750-811-8241

\*CEC Type 22 paper may be used for the 5-119V provided it is used with a 0.8 filter and a closed magazine (5-006).

## DEVELOPER SOLUTION

PART NO.	DESCRIPTION
49943-3	DATARITE Developer (highest writing speed and trace contrast) — 9 oz. bottle FSN 6750-860-6907
49943-4	DATARITE Developer (recommended where high humidity is a problem) — 9 oz. bottle FSN 6750-060-7301

These DATARITE products are available from your nearest CEC sales and service office. Please contact them for pricing information.

## TECHNICAL SUPPLIES REGIONAL REPRESENTATIVES

CEC Field Engineers are supported in each region by a

Technical Supplies Regional Representative. Representatives are located in Los Angeles, California; Albuquerque, New Mexico; Orlando, Florida; Hasbrouck Heights, New Jersey; Chicago, Illinois; and Washington, D.C. To facilitate delivery, Technical Supplies maintains warehouses located in Pasadena, California; Dallas, Texas; and Washington, D.C.

TECHNICAL SUPPLIES  
DEPARTMENT

**CEC**

**CONSOLIDATED ELECTRODYNAMICS**  
360 SIERRA MADRE VILLA, PASADENA, CALIFORNIA • A SUBSIDIARY  
OF BELL & HOWELL • FINER PRODUCTS THROUGH IMAGINATION



FEDERAL STOCK NUMBER 6750-080-1771

## NO. 156455 LIQUID CONCENTRATE CHEMICALS KIT

*A compact kit of liquid developer and stabilizers for CEC's  
23-109A Oscillogram Processor*

### DESCRIPTION

CEC's No. 156455 Liquid Concentrate Chemicals Kit consists of four plastic throwaway bottles packaged in a compact cardboard box. One bottle contains a liquid concentrate developer; the other three contain stabilizer solutions. The liquid concentrates are used in the four tanks of Consolidated's Type 23-109A Oscillogram Processor. Addition of warm water simultaneously dilutes and mixes the solutions. There is nothing more to do.

Use of the solutions contained in the new kit produces records of superior quality. Consolidated has added a special lubricant to the last two stabilizer solutions which reduces wear on processor wipers, prevents transfer of residue from the drums, and enhances the appearance of the finished record.

The new kits eliminate the need for chemical mixing and handling of dry powders. Other features include convenient storage, the fact that untrained personnel can prepare and operate the oscillogram processor, and the elimination of breakage loss. The chemicals do not release irritating fumes during the processing cycles. Bottled solutions are ICC approved. Kits are available through all CEC sales and service offices.